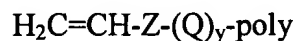


**In the Claims:**

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1. (Original) Terminal olefin functionalized macromonomers of the formula:



wherein:

Z is a C3 to C18 linear, branched or cyclic alkylene radical, optionally containing aryl or substituted aryl groups;

Q is a hydrocarbyl group derived by incorporation of a compound selected from the group consisting of conjugated dienes, alkenylsubstituted aromatic compounds and mixtures thereof;

y is a number greater than 0 to about 5; and

poly comprises a polymer derived from one or more anionically polymerizable monomers.

B<sup>1</sup>  
2. (Original) The macromonomer of Claim 1, wherein said polymer comprises one or more anionically polymerizable monomers selected from the group consisting of olefin monomers, alkenylsubstituted aromatic monomers, polar monomers and mixtures thereof.

3. (Original) The macromonomer of Claim 2, wherein said anionically polymerizable monomer comprises one or more olefin monomers.

4. (Original) The macromonomer of Claim 3, wherein said one or more olefin monomers comprises ethylene.

5. (Original) The macromonomer of Claim 3, wherein said one or more olefin monomers comprises one or more conjugated diene monomers.

6. (Original) The macromonomer of Claim 5, wherein said one or more conjugated diene monomers is selected from the group consisting of 1,3-butadiene, isoprene, 2,3-dimethyl-1,3-butadiene, 1,3-pentadiene, myrcene, 2-methyl-3-ethyl-1,3-butadiene, 2-methyl-3-ethyl-1,3-pentadiene, 1,3-hexadiene, 2-methyl-1,3-hexadiene, 1,3-heptadiene, 3-methyl-1,3-heptadiene, 1,3-octadiene, 3-butyl-1,3-octadiene, 3,4-dimethyl-1,3-hexadiene, 3-n-propyl-1,3-pentadiene, 4,5-diethyl-1,3-octadiene, 2,4-diethyl-1,3-butadiene, 2,3-di-n-propyl-1,3-butadiene, 2-methyl-3-isopropyl-1,3-butadiene, and mixtures thereof.

7. (Original) The macromonomer of Claim 6, wherein said one or conjugated diene monomers comprises butadiene.

8. (Original) The macromonomer of Claim 6, wherein said one or more conjugated diene monomers comprises isoprene.

9. (Original) The macromonomer of Claim 5, wherein poly comprises a saturated polymer.

10. (Withdrawn) The macromonomer of Claim 2, wherein said anionically polymerizable monomer comprises one or more alkenylsubstituted aromatic monomers.

11. (Withdrawn) The macromonomer of Claim 10, wherein said one or more alkenylsubstituted aromatic monomers comprises styrene, alpha-methylstyrene, vinyltoluene, 2-vinylpyridine, 4-vinylpyridine, 1-vinylnaphthalene, 2-vinylnaphthalene, 1-alpha-methylvinylnaphthalene, 2-alpha-methylvinylnaphthalene, 1,2-diphenyl-4-methyl-1-hexene, 3-

methylstyrene, 3,5-diethylstyrene, 4-*tert*-butylstyrene, 2-ethyl-4-benzylstyrene, 4-phenylstyrene, 4-*p*-tolylstyrene, 2,4-divinyltoluene, 4,5-dimethyl-1-vinylnaphthalene, and mixtures thereof.

12. (Withdrawn) The macromonomer of Claim 11, wherein said one or more alkenylsubstituted aromatic monomers comprises styrene.

13. (Withdrawn) The macromonomer of Claim 12, wherein poly is saturated to form a polymer comprising vinylcyclohexane units.

B1  
14. (Withdrawn) The macromonomer of Claim 13, wherein poly further comprises ethylene monomer units to form vinylcyclohexane-*b*-ethylene blocks.

15. (Withdrawn) The macromonomer of Claim 1, wherein poly comprises hydrogen at the end thereof.

16. (Withdrawn) The macromonomer of Claim 1, wherein poly comprises a functional group FG at the end thereof.

17. (Withdrawn) The macromonomer of Claim 16, wherein FG comprises a functional group selected from the group consisting of hydroxyl, thio, amino, carboxyl, amide, silyl, acrylate, sulfonic acid, isocyanate, and epoxide.

18. (Withdrawn) The macromonomer of Claim 16, wherein FG comprises -Y-W-(B-R<sup>4</sup>R<sup>5</sup>R<sup>6</sup>)<sub>k</sub> wherein:

Y is a C1 to C18 linear, branched or cyclic alkylene radical, optionally containing aryl or substituted aryl groups;

W is oxygen, nitrogen or sulfur;

(B-R<sup>4</sup>R<sup>5</sup>R<sup>6</sup>) is a protecting group in which B is an element selected from Group IVa of the Periodic Table of the Elements; and R<sup>4</sup>, R<sup>5</sup>, and R<sup>6</sup> are each independently defined as hydrogen, alkyl, substituted alkyl, aryl, substituted aryl, cycloalkyl and substituted cycloalkyl or R<sup>6</sup> is optionally a -(CR<sup>7</sup>R<sup>8</sup>)<sub>l</sub>- group linking two B when k is 2, wherein R<sup>7</sup> and R<sup>8</sup> are each independently selected from the group consisting of hydrogen, alkyl, substituted alkyl, aryl, substituted aryl, cycloalkyl, and substituted cycloalkyl, and l is an integer from 1 to 7; and

k is 1 when W is oxygen or sulfur and 2 when W is nitrogen.

19. (Withdrawn) The macromonomer of Claim 16, wherein FG comprises -Y-W-(H)<sub>k</sub> wherein:

W is oxygen, nitrogen or sulfur;

Y is a C1 to C18 linear, branched or cyclic alkylene radical, optionally containing aryl or substituted aryl groups; and

k is 1 when W is oxygen or sulfur and 2 when W is nitrogen.

20. (Withdrawn) The macromonomer of Claim 1, wherein poly comprises an olefin group -CH=CH<sub>2</sub> at the end thereof.

21. (Withdrawn) The macromonomer of Claim 1, wherein poly comprises a polymer segment at the end thereof.

In re: Quirk et al.  
Serial No.: 09/812,344  
Filed: March 20, 2001  
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22-79. (Cancelled)

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